

Work Order ID 71274

Friday, June 24, 2011 3:44:12 PM

ASAP



Page 1

Item ID: D3177-043

Accept



Setup Start



Revision ID:

Stop



Item Name: Bracket

Start Date: 6/24/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 6/30/2011 Req'd Qty: 2.00



Customer:

Reference:

Approvals:

Process Plan:

H

Date: 11/06/27 Tooling:

Date:

QC:

Date: SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3177	Rev B2								
100	BAND SAW	0.00							
	Bandsaw	0.00							
Jeaspa Bandsaw	Memo Cut blank: 47.40" x (12.000" +0.100/-0.000)	0.00							
110	HAAS CNC VERTICAL MACHINING #1	0.00							
	HAAS 1	0.00							
HAAS CNC vertical machine #1	Memo Machine part as per Folio FA291 and Dwg D3177. □Deburr	0.00							
120	QC2- Inspect parts off machine FAI/FAIB	0.00							
	QC	0.00							
Quality Control	Memo	0.00							

cut 11/06/28

2 / 8

cut 11/06/28

2 / 8

cut 11/06/28

2 / 8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3177-043 PAR #: N/A Fault Category: Prod/Stores NCR: Yes No DQA: lt Date: 11.07.11
 Resolution: Use - as - is Disposition: Use - as - is QA: N/C Closed: CK Date: 11/09/11

NCR: <u>71274</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
11.06.28	110	0.700 ^{+0.010} _{-0.000} DIM 15 0.684 R.C. material has a bend Due to storage at Dart.	<u>CP</u> 11.06.28 <u>PS/642</u>	Difference in inertia is ± 2%. No significant effect on M.S. of SR-D130-7A-1 (M.S. = 0.24)	<u>CP</u> 11/06/28	<u>SL</u> 11/06/29	<u>CP</u> 11.06.28 <u>PS/642</u>	<u>8</u> <u>W/2/05</u>

NOTE: Date & initial all entries

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Page 2

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00		SL 11/06/29		<u>2</u>	<u>0</u>		
140 HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00				<u>2</u>	<u>BL 11-6-30.</u>		
150 Small Fab Small Fab	Small Fab Memo Press D3177-5 Spacers as shown on Dwg D3177	0.00 0.00				<u>2</u>	<u>11/07/04</u>	<u>(2)</u>	

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Friday, June 24, 2011 3:44:12 PM



Page 3

Item ID: D3177-043

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Setup Start



Revision ID:

Stop



Item Name: Bracket

Start Date: 6/24/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 6/30/2011 Req'd Qty: 2.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

0.00

Powder Coating

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

M 117745

3200

3:00

2x of M 11/07/04

170

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

2 & BR 11-7-4.

180

Small Fab

0.00



Small Fab

Memo

0.00

Small Fab

Assemble as per Dwg D3177

EP 11/07/05 (2)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Work Order ID 71274

Friday, June 24, 2011 3:44:12 PM



Page 4

Item ID: D3177-043

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Item Name: Bracket

Start Date: 6/24/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 6/30/2011 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

190

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

200

Identify as per dwg & Stock Location: 7135/

0.00



Packaging

Memo

0.00

Packaging

210

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

Puff/s

(2)

11/7/5

ONE
11-07-05

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

Picklist Print

Friday, June 24, 2011 3:44:18 PM

Page 1

Work Order ID: 71274

Parent Item: D3177-043

Parent Item Name: Bracket



Start Date: 6/24/2011

Required Date: 6/30/2011

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev: B03.01.27 Added Step 12 KJ/RF

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B1.000X13.00 0		Purchased	No				f	0.0000		4.210526			
6061T6 BAR 1.00 X 13.00													
MS27039-1-11		Purchased	No			100	Each	66.0000	1				
Screw													
<div> <div>Location</div> <div>MEZZ</div> <div>9662</div> </div> <div> <div>Loc Qty</div> <div>66</div> <div>66</div> </div> <div> <div>Loc Code</div> <div></div> <div></div> </div>													
AN960JD10	NAS1149D0363J	Purchased	No			180	Each	0.0000	3				
Washer													
BLRS-010		Purchased	No			180	Each	25.0000	1				
Pip Pin													
<div> <div>Location</div> <div>ST283</div> <div></div> <div>116348</div> <div>117784</div> <div>117785</div> </div> <div> <div>Loc Qty</div> <div>25</div> <div>3</div> <div>12</div> <div>10</div> </div> <div> <div>Loc Code</div> <div></div> <div></div> <div></div> <div></div> </div>													
D2690-6		Manufactured	No			180	Each	46.0000	1				
Lanyard Assembly													
<div> <div>Location</div> <div>ST020</div> <div></div> <div>66873</div> <div>70920</div> </div> <div> <div>Loc Qty</div> <div>46</div> <div>1</div> <div>45</div> </div> <div> <div>Loc Code</div> <div></div> <div></div> <div></div> </div>													

M115173 X 4.00

11/06/27

11/07/05

11/7/4

15.0
This But
only

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Friday, June 24, 2011 3:44:18 PM

Page 2

Work Order ID: 71274

Parent Item: D3177-043

Parent Item Name: Bracket

Start Date: 6/24/2011

Required Date: 6/30/2011

Start Qty: 2.00

Required Qty: 2.00

D3177-5
Spacer
Manufactured No

180 Each 29.0000 4 8



80 6/27/11

(2)

Location Loc Qty Loc Code

ST039 29
20295 29

MS21042L3
Nut
Purchased No

180 Each 1,959.000 1 2



11/2/11

Location Loc Qty Loc Code

ST300 1959
116549 259
117441 800
117601 400
117885 500

2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

D3065-5DART AEROSPACE LTD		Work Order:	71274
Description: Bracket		Part Number:	D3177-3
Inspection Dwg: D3177	Rev: B2	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

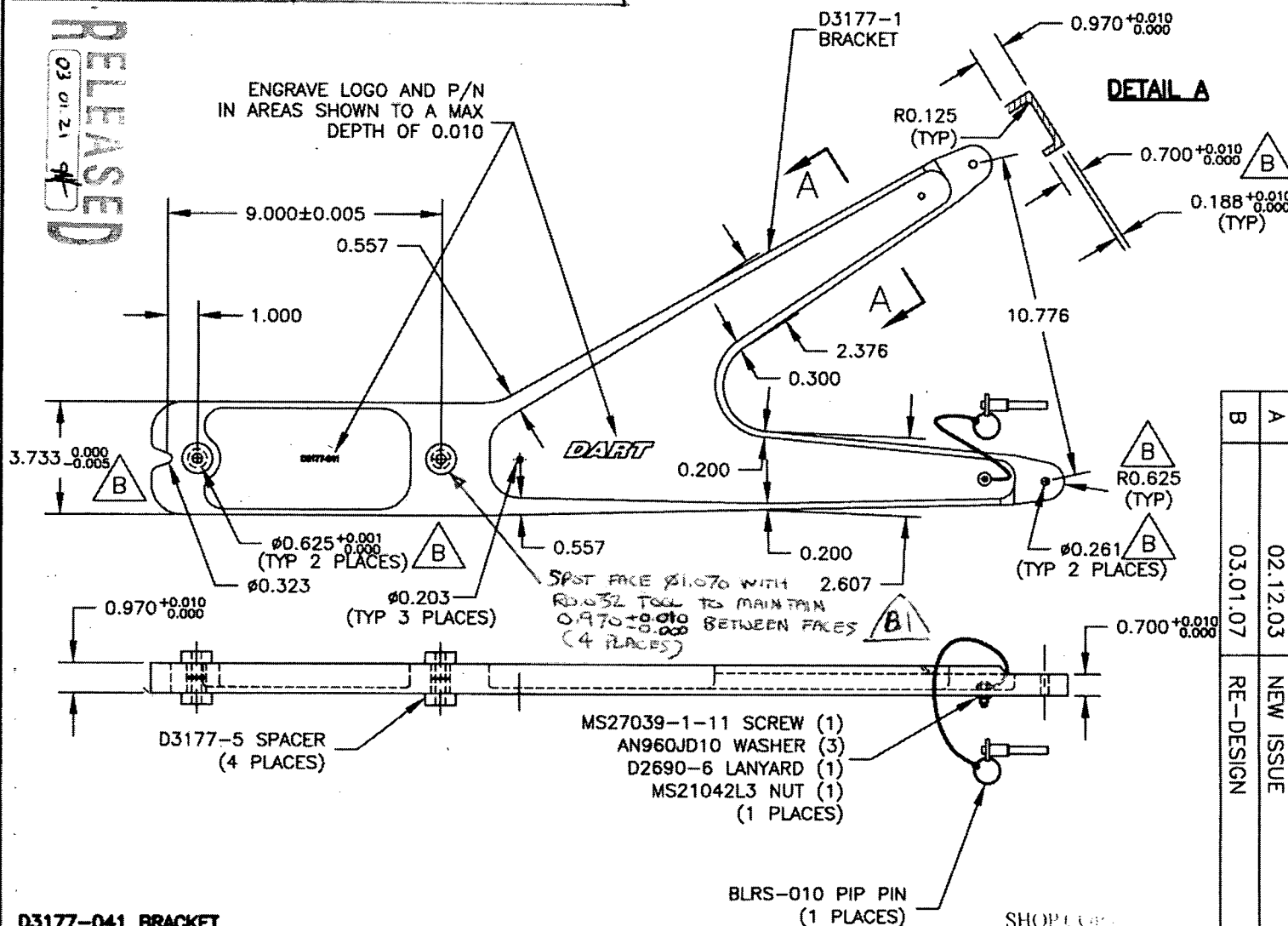
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.970	+0.010/-0.000	.975	—		Vern	ML-7
R0.125	+/-0.010	R.125	—		R-6	
0.700	+0.010/-0.000	.688		—	Vern	ML-7
0.188	+0.010/-0.000	.198	—		"	"
10.776	+/-0.005	10.772	—		Vern	ML-02
R0.625	+/-0.010	R.625	—		"	ML-7
Ø0.261	+0.005/-0.000	Ø.262	—		"	"
0.200	+/-0.010	.200	—		"	"
Ø0.203	+0.005/-0.000	Ø.203	—		"	"
Ø0.625	+0.001/-0.000	Ø.626	—		"	"
3.733	+0.000/-0.005	3.732	—		"	"
0.575	+/-0.010	.565	—		"	"
0.700	+0.010/-0.000	.700	—		"	"
0.970	+0.010/-0.000	.977	—		"	"

Measured by: <i>ML</i>	Audited by: <i>SL</i>	Prototype Approval:	N/A
Date: 11/06/28	Date: 11/06/29	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	04.02.25	New Issue	P/O D3177-041/-043	KJ/RF <i>[Signature]</i>

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED
DATE 03-01-21 BY 97



B1	03.02.25 (P-#)	ADD SPOT FARE
B2	03.11.24 (P-#)	ADD D3177-7



D3177-041 BRACKET

- 1) MACHINE D3177-1 PER DART DWG "D3177-1.SLDPRT"
MATERIAL: 6061-T6 ALUMINUM BAR (QQ-A-250/11 OR QQ-A-200/8)
(REF DART SPEC. M6061T6S OR M6061T6B)
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 (PRIOR TO ASSEMBLY)
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3 (AFTER ASSEMBLY)
- 4) TOLERANCES ARE PER QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 71274

DESIGN		DRAWING BY		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.		REV. B	
		D3177		SHEET 1 OF 3	
DATE		TITLE		SCALE	
03.01.07		BRACKET		1:5	
A	02.12.03	NEW ISSUE			
B	03.01.07	RE-DESIGN			

DART



PH-07-27

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

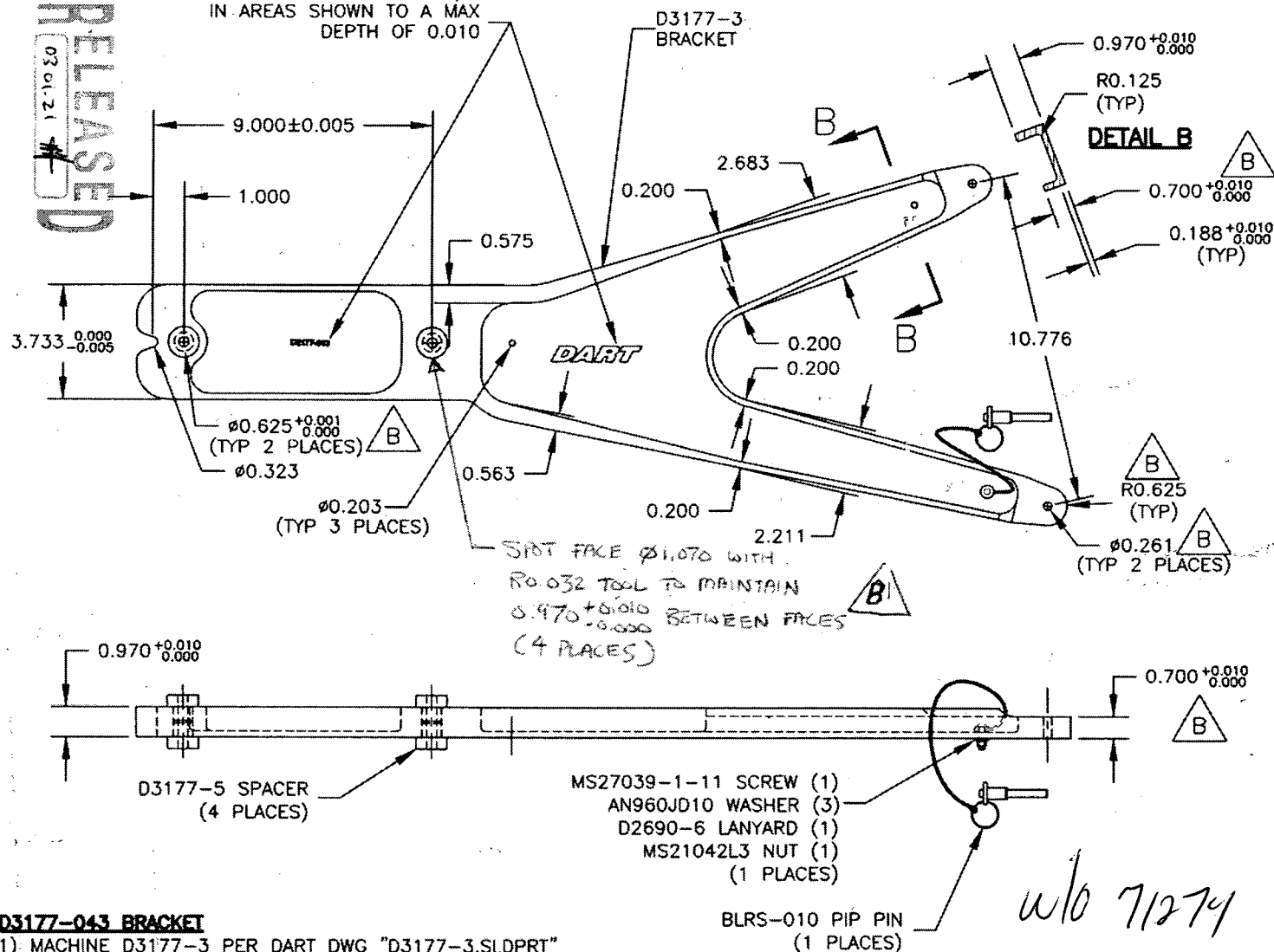
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

RELEASED
03.01.21

ENGRAVE LOGO AND P/N
IN AREAS SHOWN TO A MAX
DEPTH OF 0.010



DART



DESIGN	CHECKED	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DATE	APPROVED	DRAWING NO.	REV. B
03.01.07		D3177	SHEET 2 OF 3
		TITLE	SCALE
		BRACKET	1:5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

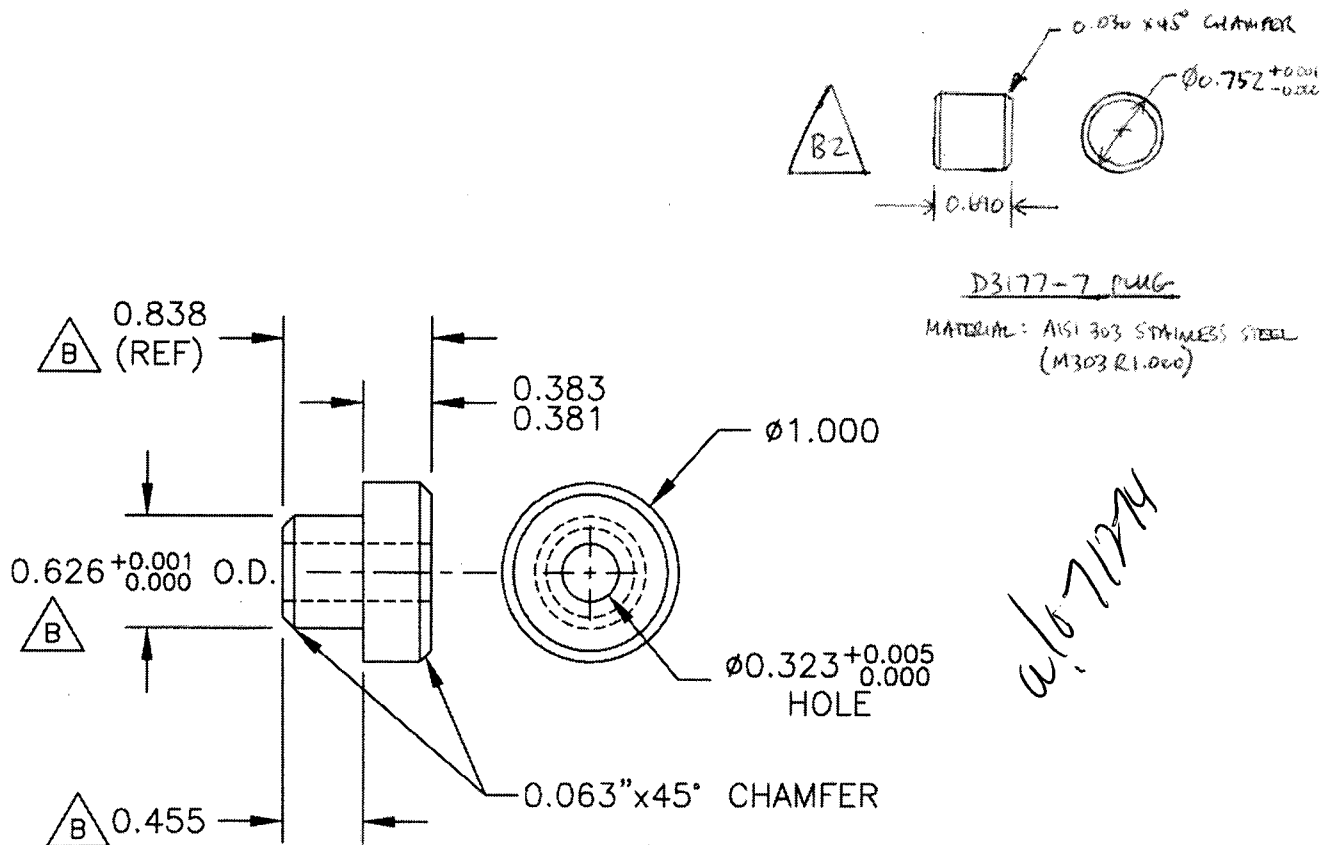
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries



DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3177	REV. B SHEET 3 OF 3
DATE 03.01.07		TITLE BRACKET	SCALE 1:1



D3177-5

- 1) MATERIAL: 6061-T6 ALUMINUM BAR $\phi 1.000$
(QQ-A-200/8 OR QQ-A-225/8)
(REF DART SPEC. M6061T6R1.000)
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

RELEASED
03 01 21 *[Signature]*

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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